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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,591	01/10/2002	Richard D. Heisey	73-96	5219

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CNH INTELLECTUAL PROPERTY LAW DEPARTMENT
CASE NEW HOLLAND INC.
P.O. BOX 1895
MS 641
NEW HOLLAND, PA 17557

EXAMINER

MAMMEN, NATHAN SCOTT

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 09/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/041,591

Applicant(s)

HEISEY, RICHARD D.

Examiner

Nathan S Mammen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diekhans, U.S. Patent No. 6,073,428, in view of Ushiro (U.S. Patent 4,953,427).

The Diekhans '428 patent discloses a combine harvester including threshing, cleaning, and separating systems. See. Fig. 1. The combine harvester includes wheels for propelling the harvester over the ground and an engine driving the wheels via a hydrostatic drive system. See Fig. 1 and col. 7, lines 5-12. The combine harvester includes an engine control circuit. See. Fig.

2. What the Diekhans '428 patent does not disclose is that the harvester includes an interconnected gear select lever, manual throttle control switch, and a speed modification switch. The Ushiro '427 patent teaches that it is known in the agricultural art to provide hydrostatic vehicles with a gear select lever (25) for changing a gear ratio of the transmission, a manually operable throttle control switch (21) for providing a plurality of positions corresponding to a desired engine speed, and a speed modification switch (24). The speed modification switch has a first state and a second state, wherein movement of the gear select lever from a first position to a second position switches the speed modification switch from the first state to the second state and changes the gear ratio (col. 3, lines 57-62). An engine control circuit is formed by the totality of the control surfaces and interlocks (Fig. 3) and controls the speed of the engine. The engine

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control is connected to receive input from the throttle control and the speed modification switch. The engine control is responsive to the input to control the engine to run at a first speed for a given position of the throttle control when the speed control is in the first state and to run at a second higher speed when the throttle control is in a given position and the speed modification switch is in the second state (col. 3, lines 50-62). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the combine harvester of the Diekhans '428 patent with the engine control circuit, manual components and interlocks as taught by the Ushiro '427 patent, in order to provide a speed control system for the working hydrostatic vehicle, i.e., combine. See. Ushiro abstract.

Regarding claims 2, 5, 6: The Diekhans '428 patent discloses that the engine control circuit includes a programmable microprocessor (6). The engine control circuit controls the rate of fuel flow to the engine. Col. 7, lines 45-47. The microprocessor is responsive to the threshing, cleaning, and separation system so the output power of the engine does not overload them. Col. 6, lines 10-64.

Regarding claims 3 and 4: The Diekhans '428 patent discloses that the programmable microprocessor stores and accesses values. Col. 5, lines 45-65. Although the Diekhans '428 patent does not explicitly state that the values are stored in tables, it would be obvious to one of ordinary skill in the programmable controller art to store variable values in tables. Furthermore, the microprocessor stores values of the harvester's components "from a broad spectrum of working situations." Col. 6, line 56. It would be obvious, if not inherent, for the microprocessor to store and apply values from a lack of a working condition, i.e., road speed, to control the engine output.

Response to Arguments

3. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Regarding Applicant's arguments as they might apply to the above rejection: The Diekhans '428 patent discloses the combine harvester, with combine harvesting components. The Ushiro '427 patent discloses a speed control system for a working vehicle having a hydrostatic transmission. See Abstract. The exemplary working vehicle of the Ushiro '427 patent is a tractor, but the invention claimed is applicable to any hydrostatically driven working vehicle. Thus, the instant invention is obvious over the combine harvester of the Diekhans '428 patent in view of the teachings of the Ushiro '427 patent.

Applicant states that the engine control system "is a separate element" and thus the structure shown in Fig. 3 cannot meet the same limitation of an engine control system of the instant invention. However, the instant claims do not include limitations distinguishing the engine control system from being the compilation and interconnections of the speed control, gear shift and throttle controls. Therefore, Fig. 3 is deemed to meet the limitation of engine control system. Furthermore, as stated above, the Diekhans '428 patent discloses an engine control system.

The auxiliary change speed lever (25) of the Ushiro '427 patent meets the claimed limitations of the gear select lever of the instant invention. Switching the auxiliary change speed lever changes the gear ratio to the wheels.

The throttle control switch and speed modification switch interlocking relationship operates as follows: When the auxiliary change speed device is in the high speed and the throttle

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control switch is placed in a given position, pressing on the speed modification switch increases the engine speed without the user having to move the throttle control from the given position.

Conclusion

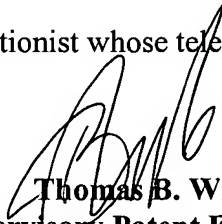
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Mammen whose telephone number is (703) 306-5959.

The examiner can normally be reached Monday through Thursday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at (703) 308-3870. The fax number for this Group is (703) 305-3579.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-1113.


Thomas B. Will
Supervisory Patent Examiner
Group 3600

NSM
9/3/03

Nathan S. Mammen